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10/518,787

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Jacques Chevallet

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EXAMINER

THEISEN, DOUGLAS J

ART UNIT

PAPER NUMBER

1797

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|---------------------------------------|---|--|
| Office Action Summary | Application No. 10/518,787 | Applicant(s) CHEVALLET ET AL. | |
| | Examiner DOUGLAS J. THEISEN | Art Unit 1797 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31-66 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 11, 14 and 16 is/are rejected.
- 7) ☒ Claim(s) 9, 12, 13, 15 and 17-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>051005, 051905, 083007, 021408</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper."

Therefore, the two journal articles and the Japanese reference listed on page 3 of the specification have not been considered.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "34" has been used to designate both "solenoid valve" and something in return branch 5 on fig. 6. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: On page 13, line 24 "34" should be "31".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 5-8, 10, 11, 14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent no. 4,806,135 to Siposs. Siposs describes a gas separation device (bubble trap 60 or 80) comprising: a containing body (body 62 or 82) having an internal active surface and having at least a first inlet aperture (tangential inlet passage 68 or 94), positioned with a tangential direction of access, and at least one outlet aperture (outlet fitting 74 or 86), spaced apart from the inlet aperture, characterized in that it comprises: a guide element (center cone 76 or filler 104) housed at least partially within the body and having a continuous active surface designed to contact and guide the fluid; a first annular chamber (debubbling chamber 70 or 92) formed between the active surface of the guide element and the internal active surface of the containing body. The outlet aperture is positioned in a lower end of the containing body, the guide element and the first chamber extending above the outlet aperture. The guide element is an internally hollow solid of rotation, designed to reduce the volume of at least the first chamber. The guide element comprises: a central portion; a first terminal portion, facing towards the outlet aperture; and a second terminal portion, axially opposed to the first terminal portion and facing towards a second chamber extending above the guide element. The first terminal portion has a cross section whose radial dimension is reduced progressively

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towards the outlet aperture (filler 104 in fig. 6). The second terminal portion has a cross section whose radial dimension is reduced progressively away from the outlet aperture (center cone 76 or filler 104). The second terminal portion has a conical shape with its vertex opposed to the outlet aperture. The active surface of the containing body has: a first area, of maximum radial dimension, extending around the central portion of the guide element; a second area (above floor of body 62 or above floor 106 of body 82), whose radial dimension is reduced progressively towards the outlet aperture, the second area extending consecutively to the first area and essentially around the first terminal portion of the guide element; a third area (under cover 64 or 88), whose radial dimension is reduced progressively away from the outlet aperture, the third area extending consecutively to the first area and essentially around the second terminal portion of the guide element. The first area of the active surface has a constant radius. See fig. 5 and 6 and column 4, line 53 to column 5, line 46.

6. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent no. 5,707,431 to Verkaart et al. Verkaart describes a gas separation device comprising: a containing body having an internal active surface and having at least a first inlet aperture (fluid inlet 2), positioned with a tangential direction of access, and at least one outlet aperture (fluid outlet 4), spaced apart from the inlet aperture, characterized in that it comprises: a guide element (cylindrical filter 14) housed at least partially within the body and having a continuous active surface designed to contact and guide the fluid; a first annular chamber (chamber 8) formed between the active surface of the guide element and the internal active surface of the containing body. The inlet aperture opens directly into the first chamber. The guide element is wholly housed within the containing

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body, extends coaxially with the latter and is spaced axially apart from the outlet aperture. The active surfaces of the containing body and of the guide element face each other and are shaped in the form of surfaces of revolution about a common axis of symmetry which is transverse with respect to the tangential direction of access of the flow. The outlet aperture is positioned in a lower end of the containing body, the guide element and the first chamber extending above the outlet aperture. The guide element comprises: a central portion; a first terminal portion, facing towards the outlet aperture; and a second terminal portion, axially opposed to the first terminal portion and facing towards a second chamber extending above the guide element. See fig. 2 and column 2, lines 24 to 54.

7. Claims 1-7, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by European patent application EP 1 084 722 A2. Flamer describes a gas separation device (filter 10) comprising: a containing body (outer housing 14) having an internal active surface and having at least a first inlet aperture (inlet conduit 22), positioned with a tangential direction of access, and at least one outlet aperture (blood outlet 29), spaced apart from the inlet aperture, characterized in that it comprises: a guide element (inner housing 12) housed at least partially within the body and having a continuous active surface designed to contact and guide the fluid; a first annular chamber formed between the active surface of the guide element and the internal active surface of the containing body. The inlet aperture opens directly into the first chamber. The guide element is wholly housed within the containing body, extends coaxially with the latter and is spaced axially apart from the outlet aperture. The active surfaces of the containing body and of the guide element face each other and are shaped in the form of surfaces of revolution

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about a common axis of symmetry which is transverse with respect to the tangential direction of access of the flow. The outlet aperture is positioned in a lower end of the containing body, the guide element and the first chamber extending above the outlet aperture. The guide element is an internally hollow solid of rotation, designed to reduce the volume of at least the first chamber. The guide element comprises: a central portion; a first terminal portion, facing towards the outlet aperture; and a second terminal portion, axially opposed to the first terminal portion and facing towards a second chamber extending above the guide element. The second terminal portion (cap 43) has a cross section whose radial dimension is reduced progressively away from the outlet aperture. The second terminal portion has a conical shape with its vertex (peak 45) opposed to the outlet aperture. See fig. 1, 3, and 5 and paragraphs 19-24, 38, and 43.

Allowable Subject Matter

8. Claims 31-66 are allowed.
9. Claims 9, 12, 13, 15, and 17-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. The following is a statement of reasons for the indication of allowable subject matter: The reasons for allowance are that the closest prior art shows applicant's features as described in claims 1, 7, 8, and 14. The closest prior art does not show applicant's features as described in claim 1 in combination with applicant's features as described in claims 17 or 30. The closest prior art does not show applicant's features as described in claim 8 in combination with applicant's features as described in claim 9. The closest prior art does not describe applicant's features as described in claim 7 in combination

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with applicant's features as described in claim 12. The closest prior art does not describe applicant's features as described in claim 14 in combination with applicant's features as described in claim 15. The closest prior art, U.S. patent no. 5,705,060 to Robberts, describes applicant's features of claim 31 of a fluid mixing device comprising a containing body having an internal active surface and having at least one first inlet aperture, and at least one fluid outlet aperture, spaced apart from the first inlet aperture, characterized in that the containing body has at least one second inlet aperture located above the first inlet aperture. The closest prior art does not describe that the second inlet is designed to convey a second fluid into the containing body to form a layer of the second fluid above the physiological fluid. The closest prior art does not describe applicant's features as described in claim 63.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS J. THEISEN whose telephone number is (571)272-1168. The examiner can normally be reached on Monday, Tuesday, and Wednesday 6:30 until 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Duane S. Smith/
Supervisory Patent Examiner, Art Unit
1797
5-13-08

djt